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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,364	02/27/2006	Jin-Suk Lee	ASIAP022.US01	3081
45965	7590	06/10/2010	EXAMINER	
TIPS GROUP			CUTLIFF, YATE KAI RENE	
c/o Intellevate LLC			ART UNIT	
P. O. BOX 52050			PAPER NUMBER	
Minneapolis, MN 55402			1621	
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			06/10/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/551,364

**Applicant(s)**

LEE ET AL.

**Examiner**

YATE' K. CUTLIFF

**Art Unit**

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2010.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 12, 14 - 21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11, 12, 14 - 21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Status of Claims***

1. Claims 11, 12 and 14 – 21 are pending.  
Claims 1 – 10, 13 and 22-34 have been canceled  
Claims 11, 12 and 14 - 21 are rejected.

***Response to Amendment***

2. The amendment to claim 1, submitted March 2, 2010 is acknowledged and entered.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 14 recites the limitation "the crude alkyl ester" in line 2. There is insufficient antecedent basis for this limitation in the claim.
6. Applicant may want to amend the claim to mirror the language claim 11 for steps (a) and (b).

***Response to Arguments***

7. Applicant's arguments, see page 5, filed March 2, 2010, with respect to 35 USC 112 first paragraph rejection of claims 11, 12 and 14 - 21 have been fully considered

and are persuasive in view of the amendment to claim 11. The rejection of claims 11, 12 and 14 – 12 under 35 USC 112 first paragraph has been withdrawn.

8. Applicant's arguments filed March 2, 2010 with regard to the 35 USC 103(a) rejections of claims 11, 12 and 14 - 21 have been fully considered but they are not persuasive for the reasons set out in the Office Action Mailed 11/25/2009, and as set out below.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 11, 12 and 14 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lever Brothers & Unilever Limited (GB 612,667) (Lever), in view of Sucher & Holzer Bauplan Handel (AT 406870B) (Sucher), in view of Peter et al. (WO 03/004591; US 6,933,398), and further in view of Peterson et al. (JAOCS, Vol. 61, 1984), for the reasons set out in the Office Action mailed November 25, 2009 and as set out below.

13. Applicant respectfully asserts that in contrast to the Sucher and Peter reference, Applicant's claimed process directly refluxes the product comprising alkyl ester from reactor (14) prior to going through the glycerine/ester separator 15. Further, Applicant directs the Examiner to Applicant's Figure 3. Specifically, asserting that Applicant's process refluxes alkyl ester and glycerin along with non-reacted tri- di-, mono-glyceride before the separation process, which is unlike the processes described in the cited art in which the methyl ester is separated and refined before being refluxed.

14. However, the Examiner notes that Figure 3 discloses a recycle process and not a refluxing step. The primary reference of Lever in Example 2 discloses that alkyl ester product is allowed to reflux in the reactor prior to separation. (see page 4). As such, refluxing of the alkyl ester prior to separation is taught by Lever. Thus, the obviousness rejection is maintained.

15. Examiner notes that Applicant's is actually arguing that there is a recycling of the product from 14 back to reactor 11 and mixer 13, and that the prior art references do not teach this processing step. However, refluxing generally involves a distillation type apparatus and a portion of the overhead liquid product from the distillation column of fractionator is returned to the upper part of the column. Basically, reflux is the process of boiling reactants while continually cooling the vapor returning it back to the flask as a liquid. (i.e. Example 2 of Lever)

16. In response, Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., recycling of alkyl ester back into the pre-esterification reactor and or the transesterification reaction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case the specification is to a refluxing process, while, Applicant's Figure 3 teaches a recycling process.

The Examiner notes that based on Figure 3, there is support for amending the claims to include the term recycle instead of reflux. Also, the Examiner suggests that Applicant review the specification to amend the specification to align with Figure 3. (i.e. [30], [101] and [102]).

### **Conclusion**

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YATE' K. CUTLIFF whose telephone number is (571)272-9067. The examiner can normally be reached on M-TH 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel M. Sullivan can be reached on (571) 272 - 0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yaté K. Cutliff/  
Patent Examiner  
Group Art Unit 1621  
Technology Center 1600

/Porfirio Nazario-Gonzalez/  
Primary Examiner  
Art Unit 1621